

REMARKS/ARGUMENTS

Reexamination and reconsideration of this Application, withdrawal of the rejection, and formal notification of the allowability of all claims as now presented are earnestly solicited in light of the above amendments and remarks that follow.

Claims 8-9, 11-20, 22-24, 26, 27, 31-34, and 39-44 are pending in the application. The subject matter of claim 30 has been incorporated into claim 31. As a result, claim 30 has been cancelled. As a result of this amendment, all claims of record include the subject matter of original claim 30, which was only previously rejected as anticipated by the Magill reference in a rejection overturned by the recent decision by the Board. We also note that there is no pending rejection against claim 43. Applicants presume that claim 43 would be allowable if rewritten in independent form.

Claims 11-13, 26, 27, 30, 31, 39-42, and 44 stand rejected as obvious in light of U.S. Pat. No. 6,855,422 to Magill alone, or optionally in combination with U.S. Pat. No. 4,623,579 to Quon. The Examiner alleges that the Magill patent teaches fibers comprising a core and a sheath and generically teaches use of colorants, as allegedly confirmed by the Quon patent. The Examiner also relies upon the Magill patent as teaching a wide percentage of core/sheath cross-sectional areas. Applicants respectfully traverse this rejection.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim elements. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As indicated previously, the Magill reference is not concerned with the formation of fibers characterized by a high degree of luminance. In fact, the word "luminance" or "luminescent" does not appear at any point in the cited patent. Further, Applicants' elected

species of phosphorescent pigments is nowhere described in any section of the cited patent. The only mention of anything remotely dealing with luminescence is the presence of “fluorescent whitening agents” in a laundry list of fiber additives appearing in column 6. The reference to fluorescent whitening agents appears in the midst of at least 60 different types of fiber additives. The cited patent does not contain any examples wherein a luminescent colorant is incorporated into a fiber. Instead, the clear focus of the reference is on incorporation of a temperature regulating material into the fiber for the purpose of providing a fiber having enhanced reversible thermal properties.

Although the patent does suggest that the ratio of core-to-sheath can vary, that disclosure has no meaningful relevance to the claimed invention. Again, the Magill patent is not directed to a luminescent fiber, but rather to a fiber containing a phase change material that is useful as a temperature regulating material. It is in this context that the reference discloses that a wide variance of core/sheath weight percentages can be used. One of ordinary skill in the art would not view Magill as fairly teaching or suggesting a fiber as presently claimed, which not only requires the presence of a luminescent colorant, but also requires that the luminescent colorant be present in a specific component of the fiber that comprises a specific percentage of the cross-sectional area of the overall fiber. Magill simply fails to teach such a fiber with the necessary level of detail to motivate one of ordinary skill in the art to produce a fiber as presently claimed without relying on Applicants’ disclosure. Only impermissible hindsight using the present application as a guide would result in one of ordinary skill in the art piecing together the various parts of the Magill patent necessary to come up with the presently-claimed invention.

The Magill reference provides no specific teachings that are relevant to the present claims, and contributes nothing more than an extremely broad cross-sectional area range for a sheath/core fiber and a single mention of a luminescent colorant in a laundry list of fiber additives. There are no specific examples that are even remotely related to the present invention.

In terms of core cross-sectional area, the Magill reference discloses an extremely large range (10-90% core area), while the claimed range is relatively small (20% or less). In MPEP § 2144.05, overlap of ranges is specifically addressed as it pertains to an obviousness analysis. In that section, it is noted that “if the reference’s disclosed range is so broad as to encompass a very

large number of possible distinct compositions, this might present a situation analogous to the obviousness of a species when the prior art broadly discloses a genus.” In other words, where the disclosed range is very large in comparison to the claimed range, obviousness does not necessarily follow. Looking to the MPEP section on evaluation of obviousness in the context of a genus in the art and a claimed species, we note that one important step is determination of whether one of ordinary skill in the art would have been motivated to select the claimed species or subgenus. This motivation is simply lacking in the present case. Nothing in the Magill reference would motivate the skilled artisan to form a sheath/core fiber with a core cross-section of less than 20% and wherein the core (and only the core) includes a luminescent colorant. The Magill reference is clearly not directed to such a fiber and does not contain sufficient teachings to lead one of ordinary skill in the art to make such a fiber.

In addition, even if a *prima facie* case of obviousness was proven, the specification contains evidence of surprising results related to the claimed invention that would weigh heavily against the rejection. Specifically, the specification describes bicomponent fibers in Examples 1 and 2 that comprise a 20% luminescent core that is surprisingly brighter in luminescence than comparable fibers with luminescent colorant dispersed throughout the entire fiber cross-section, but with the same overall amount of colorant. Nothing in the prior art suggests this result, which provides additional evidence against the propriety of asserting that the very broad and non-specific teachings of Magill render obvious the claimed invention. In light of the foregoing, Applicants respectfully request reconsideration and withdrawal of this rejection.

Applicants also note that the Examiner did not apply the above rejection against claims 22, 23, 32, 33, and 34 (in addition to claim 43 discussed previously). It is presumed that those claims are allowable over the cited art.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

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